

Atlantic Richfield Company

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June 8, 2012

CERTIFIED – RETURN RECEIPT REQUESTED

Ms. Jere Johnson
Remedial Project Manager
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street, SFD-9-1
San Francisco, CA 94105

Subject: May 2012 Monthly Report, Yerington Mine Site, Lyon County, Nevada: Administrative Order for Remedial Investigation and Feasibility Study (RI/FS), CERCLA Docket No. 9-2007-0005; Administrative Order on Consent, CERCLA Docket No. 09-2009-0010

Dear Ms. Johnson:

Pursuant to the above referenced orders issued by the U.S. Environmental Protection Agency - Region 9 (EPA), Atlantic Richfield Company (ARC) has prepared this May 2012 monthly report for RI/FS and Operations and Maintenance (O&M) activities at the Yerington Mine Site (Site).

May 2012 Activities

Site Security and O&M Activities

- Continued routine Site O&M, security and bird deterrent activities. Security cameras at various locations (e.g., Main and Arimetco gates, entrances to buildings) indicated no activity of concern.
- “Wind Dancers” were operated at the Slot Pond, the Pumpback Well System (PWS) Pond, and the Lined Evaporation Pond. Propane cannons were operated at the Arimetco Fluid Management System (FMS) ponds (with the exception of the VLT Pond, as directed by EPA). Locations of “Wind Dancers” and bird deterrent flags were rotated every two weeks, or as field observations dictated, to lessen the possibility of birds becoming habituated to these deterrents. The bird guard towers remained active due to water in the PWS Pond. Start/stop times on all cannons continued to be adjusted to reflect changing timing of sunrise and sunset.
- Water levels in PWS Evaporation Pond cells: North Cell = 0.0 feet; Middle Cell = 0.3 feet; South Cell = 1.5 feet (water in the two cells primarily from the November 2011 aquifer test).
- Arimetco FMS pond levels: Phase 1 Pond = 3.64 feet; FMS Evaporation Pond = 8.56 feet; VLT Pond = 4.86 feet; Slot 2 Pond = 11.44 feet. Approximately 606,019 gallons were transferred from the VLT Pond to the FMS Evaporation Pond. Approximately 614,089 gallons were transferred from the Slot Pond to the FMS Evaporation Pond. Leak detectors were monitored throughout the Site. Approximately 36,716 gallons of solution were pumped from the leak detectors in May, bringing the cumulative 2012 total to 187,533 gallons. The VLT Pond leak detector continued to be inactive through May. Remaining freeboard in the FMS Evaporation Pond at the end of May was approximately 1.57 feet. Combined drain-down from all Arimetco heap leach pads (HLPs) averaged 11.0 gallons per minute (gpm) in May. See attached monitoring data.
- Continued the compilation of data for inclusion in the 2011 Annual O&M Report for the Arimetco FMS.

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May 2012 Activities - Continued

Other Site Activities

- B.V. Nevada personnel continued with demolition and salvage activities, which are expected to continue into June.
- Site personnel continued to evaluate two-way radio coverage for the Site.
- Tri-State completed the aerial mapping and orthophoto for the Site.
- Continued the update to the Site-Wide Health and Safety Plan (HASP).
- EP&A applied a warranty application of dust suppressant polymer to select portions of the Lined and Unlined Evaporation Ponds, and a new application to the southern portion of the PWS Evaporation Pond berm on May 1-3.
- Desert Engineering and Tahoe Fence installed a new rolling gate on the Arimetco Plant entrance to the Site on May 8-9.
- As part of the ongoing Site worker safety program, on May 23 Site personnel evaluated potential on- and off-Site rattlesnake habitat and bite-prevention measures.

Site Characterization Activities

- Monthly groundwater elevation measurements were obtained May 29-31.
- A pit lake water elevation of 4,228.334 feet amsl was recorded on May 29, 2012 from the pressure transducer, an increase of 0.204 feet since April 29, 2012. The pit lake elevation has risen 3.171 feet since May 29, 2011.
- Continued meteorological monitoring at the AM-6 location including wind speed/direction, temperature, relative humidity, barometric pressure, precipitation and solar radiation.
- Two residences (DW-194 and DW-195) were added to the Bottled Water Program, and a response from one residence (DW-92) that was eligible for bottled water is still pending.
- Received a signed access agreement from the new owner of DW-77 for domestic well sampling during 2Q 2012.
- Continued the compilation of data for the 1Q 2012 Domestic Well Monitoring Report (DWMR).
- Completed the 2Q 2012 groundwater monitoring event, which included the collection of samples to be analyzed for: 1) hydrologic tracers (tritium, $^3\text{He}/^4\text{He}$ and other dissolved gases, ^{34}S and ^{18}O in dissolved sulfate, chlorofluorocarbons and sulfur hexafluoride) from all wells; 2) rare earth elements (REEs) from wells not previously sampled for REEs; 3) total (unfiltered) metals not previously sampled for either the first or second time in non-consecutive quarters in recently installed monitor wells.
- Continued data compilation for inclusion in the Annual 2011 Groundwater Monitoring Report (GMR) and the 1Q 2012 GMR.
- Continued the compilation of field and laboratory data associated with the On-Site Monitor Well program, and the preparation of the Data Summary Report.
- On May 1, ARC Transmitted to EPA responses to EPA comments dated March 15, 2012 on a technical memorandum dated January 5, 2012 that described publically available information (underground and surface water rights; groundwater elevation data) in an area northeast of the Site.
- Continued the supervision of Hazen Laboratory in preparation for upcoming aquifer solids testing.
- Continued to prepare components of the revised Site-Wide Groundwater Operable Unit (OU-1) Remedial Investigation Work Plan including data quality objectives and appendices.
- Attended a meeting with EPA on May 9 to discuss: 1) the data quality objectives for the remedial investigation of potential Arimetco HLP impacts to Site soils and groundwater; and 2) the content of the revised Site-wide Groundwater Remedial Investigation Work Plan.
- Routine database management activities and support of Site investigations and reports.

Planned June/July 2012 Activities

Site Security and O&M Activities

- Continue routine Site O&M, security and bird deterrent activities.
- As necessary, transfer fluids from the VLT Pond to the FMS Evaporation Pond to reduce or eliminate leak detector activity associated with the VLT Pond.
- As necessary, continue discussions with EPA, NDEP and SPS regarding FMS repairs.
- Continue to compile information for inclusion in the 2011 Annual FMS O&M Report, and submit the report.
- Submit the Data Summary Report for the VLT Transformer Soils Characterization and Removal Work Plan.
- Ship the excavated soils and concrete slab materials associated with the former VLT Transformer to an approved landfill, and fill in the excavation.

Site Characterization Activities

- Continue groundwater elevation and pit lake level measurements, and meteorological monitoring.
- Continue the Bottled Water Program.
- Continue the compilation of data for inclusion in the 1Q 2012 GMR and 1Q 2012 DWMR.
- Complete the compilation of data for inclusion in the 2011 Annual GMR, and submit the GMR.
- Prepare for, and conduct, the 2Q 2012 domestic well monitoring event in June.
- Continue to prepare for aquifer solids testing pending EPA approval of standard operating procedures.
- Discuss with EPA the preliminary responses to EPA comments on the draft BGQA.
- Discuss with EPA the preliminary responses to EPA comments on the 2010 Monitor Well and Ag Fields Data Summary Report (DSR).
- Continue to compile data for the on-Site Monitor Well DSR.
- Discuss the preliminary responses to EPA comments on the tech memo that described publically available surface and groundwater information north of the Site.
- Continue the compilation of information for inclusion in the revised Groundwater RI Work Plan.
- When available, review EPA's draft Process Areas (OU-3) RI Work Plan and data quality objectives for the Wabuska Drain (OU-7) RI Work Plan.
- Attend a conference call on June 7 with EPA and the Yerington Paiute Tribe (YPT) regarding groundwater flow modeling, and submit any short-term deliverables that may result from the conference call.
- Discuss the project database with EPA and YPT.

Please contact me at (714) 228-6774 or via e-mail at jack.oman@bp.com if you have any questions or comments about the May 2012 monthly report.

Sincerely,



Jack Oman
Project Manager

Attachment

cc: Dave Seter, EPA – via electronic mail
Roberta Blank, EPA – via electronic mail
Andrew Helmlinger, EPA – via electronic mail
Tom Dunkelman, EPA – via electronic mail
Greg Lovato, NDEP – via electronic mail
Tom Olsen, BLM – via electronic mail
Dan Newell, City of Yerington – via electronic mail
Phyllis Hunewill – via electronic mail
Virgil Arellano, Lyon County Commissioner – via electronic mail
Richard Faber, Lyon County Facilities Engineering – via electronic mail
Tom Grady, Nevada State Assembly – via electronic mail
Jim Sanford, MVEC – via electronic mail
Lauryne Wright, YPT – via electronic mail
Chairwoman Howard, YPT – via electronic mail
Dietrick McGinnis, McGinnis and Associates – via electronic mail
Tom Bowden, Ridolfi, Inc. – via electronic mail
Chairwoman McFalls, WRPT – via electronic mail
Vicky Moyle, WRPT – via electronic mail
Ron Halsey, Atlantic Richfield Company – via electronic mail
James Lucari, Atlantic Richfield Company – via electronic mail
Marc Ferries, Atlantic Richfield Company – via electronic mail
Brian Johnson, Atlantic Richfield Company – via electronic mail
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